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Shiftwork in Air Traffic Services: coping strategies and well-being

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University.

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ABSTRACT

It is becoming widely recognised that shiftwork has significant implications for the health, safety and quality of life of shiftworkers. To date, little research has been carried out on how individuals cope with the problems caused by shiftwork and how effective coping strategies maintain their health and well-being. It has been proposed, by Monk (1994), that there are a number of aspects of a shiftworker’s life which are important in determining the ability of an individual to cope with shiftwork. These factors are an individual’s circadian rhythms, sleep patterns, and social and domestic situation. Further literature also suggests that workplace factors and coping style are an important part of tolerating shiftwork. The primary aim of the present study was to determine which factors are important in predicting the physical and mental well-being of Air Traffic Services staff working on shifts. It was hypothesised that individuals who are evening types, have few social, domestic, sleep, and work place difficulties will be physically and mentally healthy. In addition, it was hypothesised that the use of engagement strategies in dealing with shiftwork related problems will relate to better physical and mental health. To test the hypotheses, 183 Air Traffic Services staff from Melbourne centre, Australia were surveyed by questionnaire. The results of the regressions showed that physical health was predicted by variables from each of the five areas considered; circadian typology, the social and domestic situation, work place factors, sleep patterns and coping style. Mental well-being was best predicted by a single domestic variable, which is the extent to which shiftwork caused domestic problems and the two coping variables of engagement and disengagement. The results support the suggestion that in order for an individual to be able to tolerate shiftwork they must have strategies in place to help them deal with the effect of shiftwork variables on a range of factors in their lives. An additional aim of the present study was to determine the reliability of a questionnaire for use with Air Traffic Services staff. This was due to a lack of suitable questionnaires for use in this occupational context. Overall the items in the questionnaire were found to have acceptable reliability, although the collection of sleep data by subjective reporting is not recommended.
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